Reviewer’s report

Title: Characterization of chronic and acute ESA hyporesponse: a retrospective cohort study of hemodialysis patients

Version: 3 Date: 4 April 2015

Reviewer: Davide Catucci

Reviewer’s report:

Major compulsory revisions
1) Please clearly state if ESA treatment in this patients was started on February 2012 and if so whether there was a previous wash-out period from any ESA of at least 2 months
2) Please clarify if ESA treatment was administered thrice weekly to all patients
3) Please in Table 1 indicate ESA doses in UI/Kg/session to better characterize ESA administration
4) Please explain better the choice of cut-off percentiles for haemoglobin by ESA dose stratas
5) Please comment upon inclusion into analysis for patients affected by myelodysplastic syndrome and upon incidence of GI bleeding in chronic hyporesponsive patients

Minor essential revisions
1) Please take into account to create a secondary target for incidence of cardiovascular events during follow-up and specify mortality related to cardiovascular events. Many of hyporesponsive patients were on dialysis by central venous catheter and death for sepsis may account significantly upon patients mortality

Discretionary revisions
1) Please if possible recover data on baseline reticulocytes.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
'I declare that I have no competing interests